



**EXHIBIT B**  
**PENDING CLAIMS**

U.S. PATENT APPLICATION SERIAL NO. 09/668,724  
(ATTORNEY DOCKET 8449-128)  
(as amended under 37 C.F.R. §1.111 on November 7, 2002)

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31. A method for modulating an immune response comprising administering to a human a purified compound, which decreases the interaction of a first heat shock protein with the alpha (2) macroglobulin receptor, and is in an effective amount to modulate the immune response of said human, wherein the compound is other than a heat shock protein, a complex of a heat shock protein and a peptide, RAP, alpha (2) macroglobulin, or a complex of alpha (2) macroglobulin and a peptide.

32. The method of Claim 31, in which the compound is an agonist which enhances the interaction of the heat shock protein and the alpha (2) macroglobulin receptor.

71. A method for modulating an immune response comprising administering to a human a purified compound, which binds to the alpha (2) macroglobulin receptor, in an amount effective to modulate the immune response of said human, wherein the compound is other than a heat shock protein, a complex of a heat shock protein and a peptide, RAP, alpha (2) macroglobulin, or a complex of alpha (2) macroglobulin and a peptide.

75. The method of claim 71 wherein the compound is an agonist which increases alpha (2) macroglobulin receptor activity.

76. The method of claim 31 or 71 wherein the compound is an antagonist which decreases alpha (2) macroglobulin receptor activity.

77. The method of claim 31 wherein the compound is an antibody specific for alpha (2) macroglobulin.

78. The method of claim 31 or 71 wherein the compound is an antibody specific for alpha (2) macroglobulin receptor.

79. The method of claim 31 wherein the compound is an antibody specific for first heat shock protein.

80. The method of claim 31, wherein the first heat shock protein is gp96.

81. The method of claim 31 wherein the first heat shock protein is Hsp70.

82. The method of claim 31 wherein the first heat shock protein is Hsp90.

83. The method of claim 31 or 71 wherein the compound is a small molecule.

84. The method of claim 31 or 71 wherein the compound is a peptide.

85 (new). The method of claim 31 or 71 wherein the immune response is to an autoimmune antigen.

86 (new). The method of claim 31 or 71 wherein the immune response is to an infectious disease antigen.

87 (new). The method of claim 31 or 71 wherein the immune response is to an proliferative cell disorder other than cancer.

88 (new). The method of claim 31 or 71 wherein the immune response is to a cancer antigen.

89 (new). The method of claim 88, wherein the cancer is selected from the group consisting of: human sarcomas or carcinomas, fibrosarcoma, myxosarcoma, liposarcoma, chondrosarcoma, osteogenic sarcoma, chordoma, angiosarcoma, endotheliosarcoma, lymphangiosarcoma, lymphangioendotheliosarcoma, synovioma, mesothelioma, Ewing's tumor, leiomyosarcoma, rhabdomyosarcoma, colon carcinoma, pancreatic cancer, breast cancer, ovarian cancer, prostate cancer, squamous cell carcinoma, basal cell carcinoma, adenocarcinoma, sweat gland carcinoma, sebaceous gland carcinoma, papillary carcinoma,

papillary adenocarcinomas, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, seminoma, embryonal carcinoma, Wilms' tumor, cervical cancer, testicular tumor, lung carcinoma, small cell lung carcinoma, bladder carcinoma, epithelial carcinoma, glioma, astrocytoma, medulloblastoma, craniopharyngioma, ependymoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendroglioma, meningioma, melanoma, neuroblastoma, retinoblastoma, leukemias, polycythemia vera, lymphoma, multiple myeloma, Waldenström's macroglobulinemia, and heavy chain disease.

90 (new). The method of claim 86, wherein the infectious disease is caused by a infectious agent selected from the group consisting of: hepatitis type B virus, adeno-associated virus, cytomegalovirus, papilloma virus, polyoma viruses, SV40, adenoviruses, herpes simplex type I, herpes simplex type II, Epstein-Barr virus, poxviruses, variola vaccinia virus, RNA viruses, human immunodeficiency virus type I, human immunodeficiency virus type II, human T-cell lymphotropic virus type I, human T-cell lymphotropic virus type II, influenza virus, measles virus, rabies virus, Sendai virus, poliomyelitis virus, coxsackieviruses, rhinoviruses, reoviruses, rubella virus, Semliki forest virus, arboviruses, hepatitis type A virus, *Streptococcus pyogenes*, *Streptococcus pneumoniae*, *Neisseria gonorrhoea*, *Neisseria meningitidis*, *Corynebacterium diphtheriae*, *Clostridium botulinum*, *Clostridium perfringens*, *Clostridium tetani*, *Haemophilus influenzae*, *Klebsiella pneumoniae*, *Klebsiella ozaenae*, *Klebsiella rhinoscleromatis*, *Staphylococcus aureus*, *Vibrio cholerae*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Campylobacter fetus*, *Campylobacter jejuni*, *Aeromonas hydrophila*, *Bacillus cereus*, *Edwardsiella tarda*, *Yersinia enterocolitica*, *Yersinia pestis*, *Yersinia pseudotuberculosis*, *Shigella dysenteriae*, *Shigella flexneri*, *Shigella sonnei*, *Salmonella typhiimurium*, *Salmonella typhi*, *Treponema pallidum*, *Treponema pertenue*, *Treponema carateneum*, *Borrelia vincentii*, *Borrelia burgdorferi*, *Leptospira icterohemorrhagiae*, *Mycobacterium tuberculosis*, *Toxoplasma gondii*, *Pneumocystis carinii*, *Francisella tularensis*, *Brucella abortus*, *Brucella suis*, *Brucella melitensis*, *Mycoplasma spp.*, *Rickettsia prowazeki*, *Rickettsia tsutsugumushi*, *Chlamydia spp.*, *Helicobacter pylori*, *Entamoeba histolytica*, *Trichomonas tenax*, *Trichomonas hominis*, *Trichomonas vaginalis*, *Trypanosoma gambiense*, *Trypanosoma rhodesiense*, *Trypanosoma*

*cruzi, Leishmania donovani, Leishmania tropica, Leishmania braziliensis, Pneumocystis pneumonia, Plasmodium vivax, Plasmodium falciparum, and Plasmodium malaria.*

91 (new). The method of claim 85, wherein the autoimmune disorder is selected from the group consisting of: insulin dependent diabetes mellitus, multiple sclerosis, systemic lupus erythematosus, Sjogren's syndrome, scleroderma, polymyositis, chronic active hepatitis, mixed connective tissue disease, primary biliary cirrhosis, pernicious anemia, autoimmune thyroiditis, idiopathic Addison's disease, vitiligo, gluten-sensitive enteropathy, Graves' disease, myasthenia gravis, autoimmune neutropenia, idiopathic thrombocytopenia purpura, rheumatoid arthritis, cirrhosis, pemphigus vulgaris, autoimmune infertility, Goodpasture's disease, bullous pemphigoid, discoid lupus, ulcerative colitis, and dense deposit disease.